



July 2007

DEPARTMENT OF EDUCATION
2006–2007 School Year Reports

Dear School Board Members and School Personnel:

The Maine Educational Assessment (MEA) is the State's measure of student progress in achieving the State standards known as *Learning Results*, adopted by the Maine Legislature in 1997. The *Learning Results* established goals for what all students should know and be able to do at certain times in their school careers and are the basis for Grade Level Expectations, which describe the assessment standards for each grade. The MEA is administered to students in all grades 3 through 8 to meet state assessment requirements and the requirements of the federal *No Child Left Behind* Act.

The 2006-2007 MEA Summary Reports contain the results of student achievement in reading and mathematics at all grades and science and technology at grades 4 and 8, based on achievement standards set last year and disaggregated by student and school characteristics. The reports also contain baseline status in writing at grades 5 and 8, reported according to new standards set this year through a process approved by advisory committees and informed by Maine teachers. This report, together with MEA individual student and subject specific class analysis reports, provides support for use in program evaluation and planning.

MEA results reflect scores based on test questions that are taken in common by the approximately 15,000 students in each grade level. Students' scores in each content area are based on answers to a combination of multiple-choice questions and questions that require students to construct an answer. The writing reports provide information on a student's ability to respond to a prompt measuring narrative writing at grade 5 and persuasive/argumentative writing at grade 8. More information about the design of the MEA is available at www.maine.gov/education/mea/index.htm.

I look forward to working with you in support of our continued efforts to improve the quality and effectiveness of the instructional opportunities designed to help all students achieve the high standards of the *Learning Results* and demonstrate that achievement through performance on the Maine Educational Assessment.

Sincerely,

Susan A. Gendron
Commissioner of Education



School Report Grade 4

Test Date: March 2007 (Reports Revised October 2007)
ID: 12651796
District: MSAD 74
School: Embden Elementary School

Contents of the Report

The report is divided into two main sections including a section describing the students tested and a separate section for the results in each content area.

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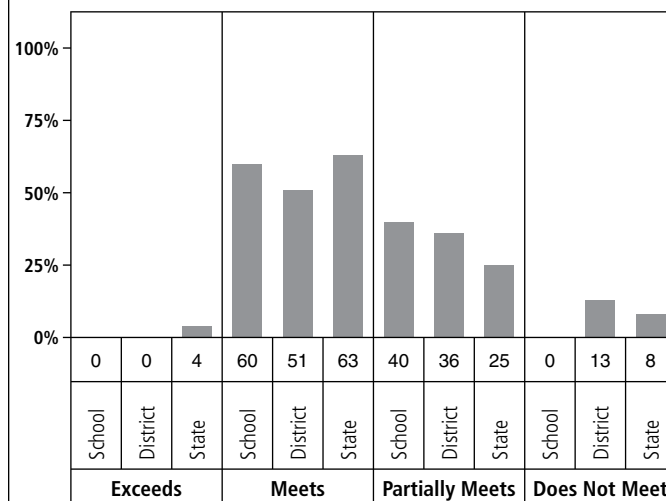
SUMMARY OF SCORES

Date: March 2007
Grade: 4
District: MSAD 74
School: Embden Elementary School

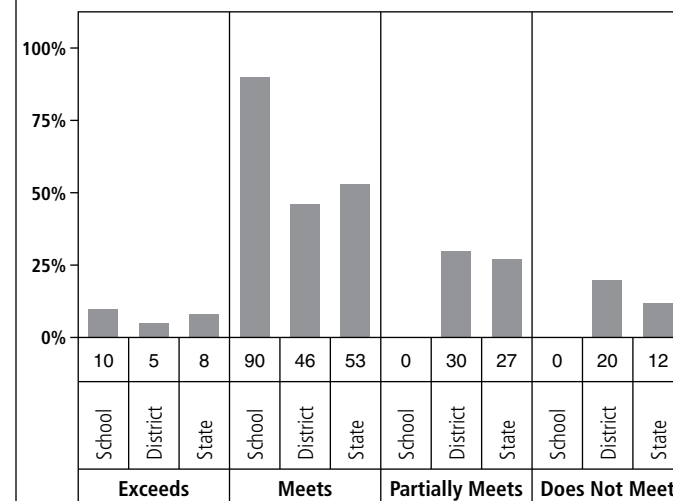
Summary of School, District, and State Scores

Year	Average Scaled Score		
	School	District	State
ELA – Reading			
2005–2006	446	445	444
2006–2007	445	442	445
Cum. Avg. *	446	443	444
Mathematics			
2005–2006	450	447	444
2006–2007	452	442	445
Cum. Avg. *	451	445	444
Science & Technology			
2005–2006	447	445	444
2006–2007	440	442	444
Cum. Avg. *	444	444	444

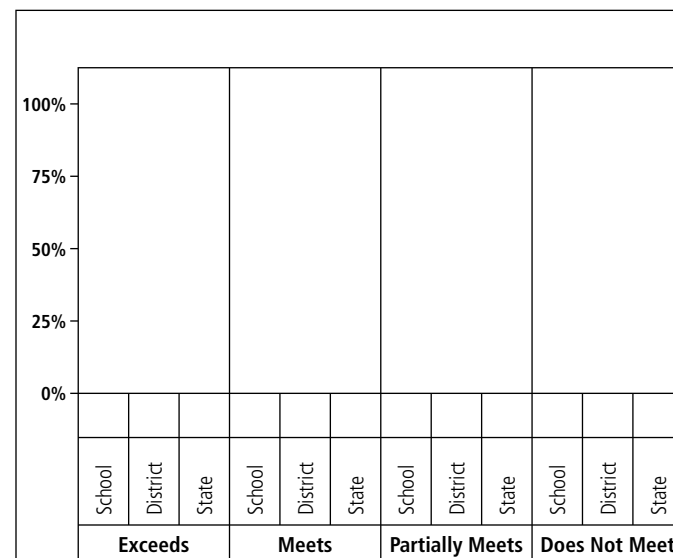
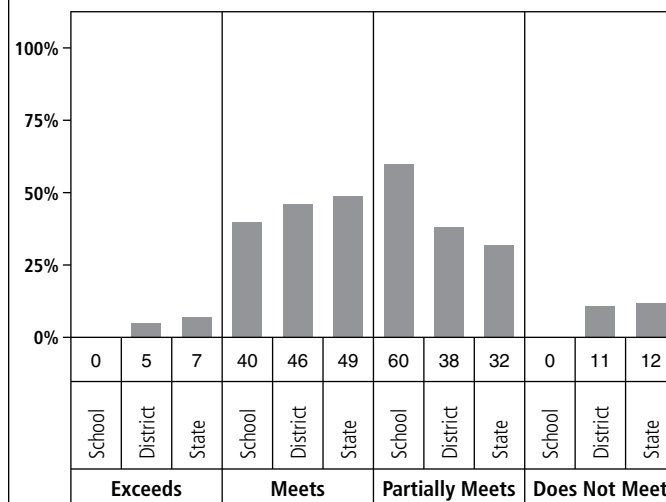
ELA – READING



MATHEMATICS



SCIENCE AND TECHNOLOGY



*Cumulative averages are weighted, i.e., the scaled scores are averaged proportionally based on the numbers of students in each year.

SUMMARY OF STUDENT PARTICIPATION

Date: March 2007
 Grade: 4
 District: MSAD 74
 School: Embden Elementary School

CATEGORY OF PARTICIPATION		Enrollment ¹ during testing window						CONTENT AREA PARTICIPATION ²																											
								ELA-Reading						Mathematics						Science and Technology															
		School		District		State		School		District		State		School		District		State		School		District		State		School		District		State					
		n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%				
Total number of students		10	100	62	100	14184	100	10	100	62	100	14078	99	10	100	62	100	14078	99	10	100	62	100	14057	99										
Ethnicity	African American	0	0	0	0	391	3	0	0	0	0	385	99	0	0	0	0	387	99	0	0	0	0	377	97										
	American Indian/Native Alaskan	0	0	2	3	117	1	0	0	2	100	112	97	0	0	2	100	112	97	0	0	2	100	112	97										
	Asian/Pacific Islander	0	0	0	0	204	1	0	0	0	0	204	100	0	0	0	0	204	100	0	0	0	0	204	100										
	Hispanic	0	0	1	2	171	1	0	0	1	100	171	100	0	0	1	100	170	99	0	0	1	100	169	99										
	White	10	100	59	95	13295	94	10	100	59	100	13204	99	10	100	59	100	13203	99	10	100	59	100	13193	99										
	Not Reported	0	0	0	0	6	0	0	0	0	0	2	33	0	0	0	0	2	33	0	0	0	0	2	33										
Identified disability		3	30	22	35	2538	18	3	100	22	100	2508	99	3	100	22	100	2509	99	3	100	22	100	2502	99										
Current LEP		0	0	0	0	302	2	0	0	0	0	298	99	0	0	0	0	300	99	0	0	0	0	289	96										
Economically disadvantaged		7	70	35	56	5522	39	7	100	35	100	5468	99	7	100	35	100	5467	99	7	100	35	100	5450	99										
Migrant		0	0	0	0	4	0	0	0	0	0	4	100	0	0	0	0	4	100	0	0	0	0	4	100										

MODE OF PARTICIPATION ³	ELA-Reading						Mathematics						Science and Technology											
	School		District		State		School		District		State		School		District		State		School		District		State	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Participation without accommodations	6	60	40	65	10869	77	7	70	41	66	10883	77	7	70	41	66	10890	77						
Identified disability (PET/IEP)	1	17	6	15	435	4	1	14	6	15	445	4	1	14	6	15	453	4						
LEP	0	0	0	0	133	1	0	0	0	0	124	1	0	0	0	0	126	1						
504 plan	0	0	0	0	122	1	0	0	0	0	122	1	0	0	0	0	123	1						
Participation with accommodations	4	40	21	34	3019	21	3	30	20	32	3029	21	3	30	20	32	3014	21						
Identified disability (PET/IEP)	2	50	15	71	1897	63	2	67	15	75	1903	63	2	67	15	75	1900	63						
LEP	0	0	0	0	151	5	0	0	0	0	172	6	0	0	0	0	160	5						
504 plan	0	0	0	0	62	2	0	0	0	0	62	2	0	0	0	0	61	2						
Other	2	50	6	29	941	31	1	33	5	25	924	31	1	33	5	25	925	31						
Participation through alternate assessment (PAAP)	0	0	1	2	180	1	0	0	1	2	166	1	0	0	1	2	153	1						
Identified disability (PET/IEP)	0	0	1	100	175	97	0	0	1	100	161	97	0	0	1	100	149	97						
LEP	0	0	0	0	4	2	0	0	0	0	4	2	0	0	0	0	3	2						
504 plan	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1	1						
Approved non-participation in reading – 1st year LEP	0	0	0	0	10	0																		
Approved non-participation – special consideration	0	0	0	0	17	0	0	0	0	0	19	0	0	0	0	0	19	0						
Non-participation – other	0	0	0	0	89	1	0	0	0	0	87	1	0	0	0	0	108	1						

1 Percents are the percentage of students enrolled in each participation category.

2 Percents are the percentage of students, including those who participated through alternate assessment (PAAP), who participated in the content area.

3 Percents are the percentage of students in each content area by mode.

ELA–READING RESULTS

Date: March 2007
Grade: 4
District: MSAD 74
School: Embden Elementary School

ACHIEVEMENT LEVEL DEFINITIONS		STUDENTS AT EACH ACHIEVEMENT LEVEL					
		School		District		State	
		N	%	N	%	N	%
Exceeds the Standards – The student’s work demonstrates the ability to read and interpret literary and informational texts appropriate for the grade level by drawing in-depth inferences, analyzing texts for subtle clues, synthesizing information across texts, and using his/her knowledge of text features and literary devices to make deeper connections within or across texts to increase comprehension. (scaled score 461–480)	2005-2006 2006-2007 Cum. Avg.	1	10	2	3	601	4
		0	0	0	0	507	4
		1	8	1	2	554	4
Meets the Standards – The student’s work demonstrates the ability to read and interpret literary and informational texts appropriate for the grade level by drawing inferences, summarizing main ideas and providing supporting details, connecting ideas within and across texts, and using his/her knowledge of text features and literary devices to increase comprehension. (scaled score 441–460)	2005-2006 2006-2007 Cum. Avg.	5	50	39	65	7910	57
		6	60	31	51	8749	63
		6	50	35	57	8330	60
Partially Meets the Standards – The student’s work demonstrates an inconsistent ability to read and interpret literary and informational texts appropriate for the grade level. The student’s ability to draw inferences, summarize main ideas and provide supporting details, connect ideas within and across texts, and use his/her knowledge of text features and literary devices varies depending on the texts. (scaled score 431–440)	2005-2006 2006-2007 Cum. Avg.	3	30	15	25	3970	29
		4	40	22	36	3467	25
		4	33	19	31	3719	27
Does Not Meet the Standards – The student’s work demonstrates a limited ability to read and interpret literary and informational texts appropriate for the grade level. The student’s responses are often vague or incorrect leaving the impression that the student found it difficult to draw inferences, summarize main ideas and provide supporting details, connect ideas within and across texts, or use his/her knowledge of text features and literary devices to support comprehension. (scaled score 400–430)	2005-2006 2006-2007 Cum. Avg.	1	10	4	7	1421	10
		0	0	8	13	1165	8
		1	8	6	10	1293	9

Learning Results Content Standard Cluster	Number of Points Possible		Average Points Attained (Number and Percent)					
			School		District		State	
	N	%	N	%	N	%	N	%
Total Reading Cluster	48	100	30.9	64.4	28.0	58.3	31.0	64.6
Literary Text	24	50	16.8	70.0	15.0	62.5	16.4	68.3
Informational Text	24	50	14.1	58.8	13.0	54.2	14.5	60.4

The Maine *Learning Results* reading cluster includes Content Standards A (Process of Reading), B (Literature and Culture), and D (Informational Texts). The MEA assesses students’ reading skills based on questions related to two types of reading passages: literary and informational. Passages include both long and short authentic texts, selected from developmentally appropriate published works. Items on the MEA measure Grade Level Expectations, based on Maine’s *Learning Results*, which can be found at <http://www.maine.gov/education/lsalt/gles.htm>.

ELA-READING RESULTS

(CONTINUED)

Date: March 2007
Grade: 4
District: MSAD 74
School: Embden Elementary School

REPORTING CATEGORIES	School										District						State					
	Tested	E		M		P		D		Mean Scaled Score	Tested	E	M	P	D	Mean Scaled Score	Tested	E	M	P	D	Mean Scaled Score
	N	N	%	N	%	N	%	N	%		N	%	%	%	%		N	%	%	%	%	
All Students	10	0	0	6	60	4	40	0	0	445	61	0	51	36	13	442	13888	4	63	25	8	445
Ethnicity																						
African American	0										0						372	0	44	31	25	437
American Indian/Native Alaskan	0										2						110	1	49	34	16	441
Asian/Pacific Islander	0										0						200	4	66	22	9	446
Hispanic	0										1						166	0	51	37	12	441
White	10	0	0	6	60	4	40	0	0	445	58	0	52	34	14	442	13038	4	64	25	8	445
Not Reported	0										0						2					
Identified disability																						
Yes	3										21	0	38	38	24	439	2332	1	34	41	25	438
No	7	0	0	4	57	3	43	0	0	445	40	0	58	35	8	443	11556	4	69	22	5	447
Limited English proficient students																						
Current LEP in first year	0										0						5	0	20	20	60	421
Current LEP beyond first year	0										0						279	0	31	36	33	435
Economically disadvantaged																						
Yes	7	0	0	4	57	3	43	0	0	446	35	0	46	37	17	441	5368	1	52	33	14	442
No	3										26	0	58	35	8	443	8520	5	70	20	5	447
Migrant																						
Yes	0										0						4					
No	10	0	0	6	60	4	40	0	0	445	61	0	51	36	13	442	13884	4	63	25	8	445
Gender																						
Female	4										25	0	52	48	0	443	6719	5	65	23	8	446
Male	6	0	0	4	67	2	33	0	0	448	36	0	50	28	22	441	7167	3	61	27	9	444
Not Reported	0										0						2					
Title 1A targeted program																						
Yes	7	0	0	3	43	4	57	0	0	444	15	0	20	60	20	438	1864	0	38	44	18	439
No	3										46	0	61	28	11	443	12024	4	67	22	7	446
Gifted/talented program																						
Yes	0										0						402	19	80	0	0	457
No	10	0	0	6	60	4	40	0	0	445	61	0	51	36	13	442	13486	3	62	26	9	445

E = Exceeds the Standards M = Meets the Standards P = Partially Meets the Standards D = Does Not Meet the Standards

NOTE: Some achievement level results have been left blank because fewer than five (5) students were tested. N = Number

ELA–READING RESULTS

(QUESTIONNAIRE ITEMS)

Date: March 2007
Grade: 4
District: MSAD 74
School: Embden Elementary School

QUESTIONNAIRE ITEMS	School										District						State					
	Students in Each Category	E		M		P		D		Mean Scaled Score	Students in Each Category	E	M	P	D	Mean Scaled Score	Students in Each Category	E	M	P	D	Mean Scaled Score
	%	N	%	N	%	N	%	N	%		%	%	%	%	%		%	%	%	%	%	
How much homework do you do on school nights?																						
A. none	0										3	0	0	0	100	428	5	1	45	33	21	440
B. less than one hour	90	0	0	6	67	3	33	0	0	447	62	0	53	39	8	443	76	4	64	24	7	446
C. one to two hours	10	0	0	0	0	1	100	0	0	434	28	0	59	35	6	443	18	4	65	24	7	446
D. more than two hours	0										7	0	25	25	50	430	2	3	43	32	23	440
How well do the questions that you have just been given on this MEA test match what you have learned in school about reading?																						
A. The questions on the test match what I have learned in reading class.	50	0	0	4	80	1	20	0	0	447	36	0	55	27	18	442	31	5	67	20	7	447
B. They match some of what I have learned.	20	0	0	1	50	1	50	0	0	443	41	0	60	40	0	443	51	3	67	24	6	446
C. They match just a little of what I have learned.	20	0	0	1	50	1	50	0	0	449	16	0	30	30	40	437	13	1	49	34	15	441
D. There is no match.	10	0	0	0	0	1	100	0	0	436	7	0	25	75	0	438	5	1	37	39	22	439
Which of the following best describes how you rate yourself as a student in reading?																						
A. very good	50	0	0	3	60	2	40	0	0	445	38	0	65	26	9	446	36	6	70	17	6	448
B. good	30	0	0	1	33	2	67	0	0	440	36	0	45	45	9	440	49	3	63	27	7	445
C. fair	20	0	0	2	100	0	0	0	0	455	21	0	38	38	23	439	13	1	49	36	14	441
D. poor	0										5	0	33	33	33	434	2	0	32	38	30	436
How hard was the reading part of this test?																						
A. harder than my regular schoolwork	10	0	0	1	100	0	0	0	0	452	10	0	50	33	17	440	16	1	47	35	17	441
B. about the same as my regular schoolwork	60	0	0	4	67	2	33	0	0	446	66	0	58	35	8	443	61	4	67	23	6	446
C. easier than my regular schoolwork	30	0	0	1	33	2	67	0	0	441	25	0	33	40	27	437	23	3	64	24	8	445
How hard were the reading passages on this test?																						
A. Most of the passages were more difficult than what I usually read.	20	0	0	0	0	2	100	0	0	437	19	0	27	55	18	439	14	0	35	42	23	438
B. Most of the passages were about the same as what I usually read.	60	0	0	4	67	2	33	0	0	446	58	0	56	38	6	443	51	3	66	25	6	445
C. Most of the passages were easier than what I usually read.	20	0	0	2	100	0	0	0	0	451	24	0	57	21	21	442	36	6	71	17	6	448
How much time do you spend reading at home each day?																						
A. more than one hour	40	0	0	2	50	2	50	0	0	444	23	0	43	43	14	440	18	6	66	21	7	447
B. 20 minutes to an hour	50	0	0	3	60	2	40	0	0	446	33	0	65	30	5	445	55	4	67	22	6	446
C. less than 20 minutes	10	0	0	1	100	0	0	0	0	446	25	0	60	33	7	442	14	1	57	29	13	442
D. I rarely read at home.	0										20	0	25	42	33	437	13	1	49	36	13	441
How many pages do you read in school and to complete homework assignments?																						
A. five or fewer pages	50	0	0	3	60	2	40	0	0	444	40	0	58	29	13	443	23	3	54	31	12	443
B. six to ten pages	30	0	0	2	67	1	33	0	0	449	30	0	50	39	11	443	26	3	63	26	8	445
C. eleven or more pages	20	0	0	1	50	1	50	0	0	443	30	0	44	39	17	439	51	4	68	21	6	447
Optional school/district question																						
A.	0										100	0	0	0	100	424						
B.	0										0											
C.	0										0											
D.	0										0											

MATHEMATICS RESULTS

Date: March 2007
Grade: 4
District: MSAD 74
School: Embden Elementary School

ACHIEVEMENT LEVEL DEFINITIONS		STUDENTS AT EACH ACHIEVEMENT LEVEL					
		School		District		State	
		N	%	N	%	N	%
Exceeds the Standards – The student’s work demonstrates in-depth understanding of essential concepts in mathematics, including the ability to make multiple connections among central ideas. The student’s responses demonstrate the ability to synthesize information; analyze and solve difficult problems, including developing and implementing strategies, efficiently and accurately performing procedures, and recording and justifying solutions; and explain complex concepts. (scaled score 461–480)	2005-2006	1	10	6	10	1294	9
	2006-2007	1	10	3	5	1054	8
	Cum. Avg.	1	10	5	8	1174	8
Meets the Standards – The student’s work demonstrates a general understanding of essential concepts in mathematics, including the ability to make connections among central ideas. The student’s responses demonstrate the ability to analyze and solve problems including developing and implementing strategies, to perform procedures, and to record and explain solutions and concepts. The student’s work may contain minor errors. (scaled score 441–460)	2005-2006	7	70	34	56	7000	50
	2006-2007	9	90	28	46	7394	53
	Cum. Avg.	8	80	31	50	7197	52
Partially Meets the Standards – The student’s work demonstrates incomplete understanding of essential concepts in mathematics and inconsistent connections among central ideas. The student’s responses demonstrate some ability to analyze and solve problems, and explain concepts. Problem solving strategies may be flawed, procedures performed inaccurately, methods not recorded and/or problems not completed. (scaled score 429–440)	2005-2006	2	20	16	26	3784	27
	2006-2007	0	0	18	30	3729	27
	Cum. Avg.	1	10	17	27	3757	27
Does Not Meet the Standards – The student’s work demonstrates limited understanding of essential concepts in mathematics and infrequent or inaccurate connections among central ideas. The student’s responses demonstrate minimal ability to solve problems and explain concepts. Problem solving strategies and procedures are often flawed or inappropriate and there may be many omissions. (scaled score 400–428)	2005-2006	0	0	5	8	1894	14
	2006-2007	0	0	12	20	1735	12
	Cum. Avg.	0	0	9	15	1815	13

Learning Results Content Standard Clusters	Number of Points Possible		Average Points Attained (Number and Percent)					
			School		District		State	
	N	%	N	%	N	%	N	%
Cluster 1: Numbers and Operations	15	31	12.7	84.7	9.1	60.7	10.1	67.3
Cluster 2: Shape and Size	14	29	9.0	64.3	8.0	57.1	8.6	61.4
Cluster 3: Mathematical Decision Making	5	10	4.5	90.0	3.7	74.0	3.6	72.0
Cluster 4: Patterns	14	29	10.0	71.4	8.5	60.7	8.9	63.6

Cluster 1: Numbers and Operations

- A. Numbers and Number Sense
- B. Computation
- I. Discrete Mathematics (grades 3 and 4 only)

Cluster 2: Shape and Size

- E. Geometry
- F. Measurement

Cluster 3: Mathematical Decision Making

- C. Data Analysis and Statistics
- D. Probability

Cluster 4: Patterns

- G. Patterns, Relations, and Functions
- H. Algebra Concepts
- K. Mathematical Communication

Each content standard in the clusters above is defined in Maine’s *Learning Results*, which are the basis for Grade Level Expectations. Each item on the MEA measures a grade level expectation, which can be found at <http://www.maine.gov/education/lslt/gles.htm>.

MATHEMATICS RESULTS

(CONTINUED)

Date: March 2007
 Grade: 4
 District: MSAD 74
 School: Embden Elementary School

REPORTING CATEGORIES	School										District						State					
	Tested	E		M		P		D		Mean Scaled Score	Tested	E	M	P	D	Mean Scaled Score	Tested	E	M	P	D	Mean Scaled Score
	N	N	%	N	%	N	%	N	%		N	%	%	%	%		N	%	%	%	%	
All Students	10	1	10	9	90	0	0	0	0	452	61	5	46	30	20	442	13912	8	53	27	12	445
Ethnicity																						
African American	0										0						381	2	33	31	34	435
American Indian/Native Alaskan	0										2						110	1	58	30	11	443
Asian/Pacific Islander	0										0						202	9	57	22	11	447
Hispanic	0										1						166	2	44	37	17	441
White	10	1	10	9	90	0	0	0	0	452	58	5	45	31	19	442	13051	8	54	27	12	445
Not Reported	0										0						2					
Identified disability																						
Yes	3										21	5	33	38	24	439	2348	2	34	34	30	437
No	7	0	0	7	100	0	0	0	0	450	40	5	53	25	18	443	11564	9	57	25	9	446
Limited English proficient students																						
Current LEP in first year	0										0						13	0	31	8	62	426
Current LEP beyond first year	0										0						283	2	34	30	34	435
Economically disadvantaged																						
Yes	7	1	14	6	86	0	0	0	0	454	35	6	46	26	23	442	5379	3	44	34	19	440
No	3										26	4	46	35	15	442	8533	11	59	23	8	448
Migrant																						
Yes	0										0						4					
No	10	1	10	9	90	0	0	0	0	452	61	5	46	30	20	442	13908	8	53	27	12	445
Gender																						
Female	4										25	4	48	24	24	441	6727	7	53	27	13	444
Male	6	1	17	5	83	0	0	0	0	454	36	6	44	33	17	442	7183	8	54	26	12	445
Not Reported	0										0						2					
Title 1A targeted program																						
Yes	7	1	14	6	86	0	0	0	0	451	15	7	47	13	33	439	1872	1	32	42	25	436
No	3										46	4	46	35	15	442	12040	9	56	24	10	446
Gifted/talented program																						
Yes	0										0						402	42	55	2	0	461
No	10	1	10	9	90	0	0	0	0	452	61	5	46	30	20	442	13510	7	53	28	13	444

E = Exceeds the Standards M = Meets the Standards P = Partially Meets the Standards D = Does Not Meet the Standards

NOTE: Some achievement level results have been left blank because fewer than five (5) students were tested. N = Number

MATHEMATICS RESULTS

(QUESTIONNAIRE ITEMS)

Date: March 2007
Grade: 4
District: MSAD 74
School: Embden Elementary School

QUESTIONNAIRE ITEMS	School										District						State					
	Students in Each Category	E		M		P		D		Mean Scaled Score	Students in Each Category	E	M	P	D	Mean Scaled Score	Students in Each Category	E	M	P	D	Mean Scaled Score
	%	N	%	N	%	N	%	N	%		%	%	%	%	%		%	%	%	%	%	
How much homework do you do on school nights?																						
A. none	0										3	0	0	50	50	424	5	4	40	28	28	439
B. less than one hour	90	1	11	8	89	0	0	0	0	453	62	5	53	24	18	443	76	8	54	26	11	445
C. one to two hours	10	0	0	1	100	0	0	0	0	446	28	6	47	29	18	442	18	7	54	28	11	445
D. more than two hours	0										7	0	0	75	25	431	2	4	36	35	26	438
How well do the questions that you have just been given on this MEA test match what you have learned in school about mathematics?																						
A. The questions on the test match what I have learned in mathematics class.	60	0	0	6	100	0	0	0	0	452	43	8	46	35	12	444	40	11	58	22	9	448
B. They match some of what I have learned.	20	0	0	2	100	0	0	0	0	446	33	0	65	15	20	442	46	6	54	29	11	444
C. They match just a little of what I have learned.	20	1	50	1	50	0	0	0	0	458	11	14	29	14	43	441	10	4	40	34	23	439
D. There is no match.	0										13	0	13	63	25	433	4	4	28	35	33	436
Which of the following best describes how you rate yourself as a student in mathematics?																						
A. very good	50	0	0	5	100	0	0	0	0	452	41	8	56	24	12	445	37	14	59	18	9	449
B. good	40	1	25	3	75	0	0	0	0	453	39	4	42	33	21	441	46	5	54	29	12	444
C. fair	10	0	0	1	100	0	0	0	0	448	18	0	36	27	36	436	14	2	42	38	19	440
D. poor	0										2	0	0	100	0	430	2	1	27	43	29	435
How hard was the mathematics part of this test?																						
A. harder than my regular schoolwork	0										14	0	25	25	50	432	12	4	37	34	25	438
B. about the same as my regular schoolwork	44	1	25	3	75	0	0	0	0	454	58	9	47	26	18	444	62	7	56	27	10	445
C. easier than my regular schoolwork	56	0	0	5	100	0	0	0	0	452	29	0	53	35	12	442	26	11	56	23	10	447
How often do you use hands-on materials in mathematics class?																						
A. almost every day	20	0	0	2	100	0	0	0	0	449	18	0	36	27	36	435	21	6	47	29	18	442
B. two or three days a week	0										23	7	21	43	29	438	37	8	55	26	11	445
C. two or three times each month	70	1	14	6	86	0	0	0	0	452	42	8	72	20	0	449	34	9	57	26	9	446
D. never	10	0	0	1	100	0	0	0	0	456	17	0	30	30	40	436	8	6	46	30	18	442
How often do you use calculators in mathematics class?																						
A. almost every day	10	0	0	1	100	0	0	0	0	452	7	0	25	25	50	435	4	2	33	34	31	436
B. two or three days a week	20	0	0	2	100	0	0	0	0	450	16	10	50	20	20	443	19	6	47	31	15	443
C. two or three times each month	70	1	14	6	86	0	0	0	0	453	46	7	64	21	7	447	56	9	58	24	8	447
D. never	0										31	0	21	47	32	435	21	6	50	28	16	443
On average, how many minutes a day do you spend working on mathematics in class?																						
A. less than 30 minutes	40	0	0	4	100	0	0	0	0	453	21	0	38	23	38	437	8	3	39	35	24	438
B. 30–45 minutes	30	1	33	2	67	0	0	0	0	454	41	4	56	24	16	444	27	5	51	30	15	443
C. 45–60 minutes	20	0	0	2	100	0	0	0	0	452	30	11	39	39	11	443	40	9	57	25	10	446
D. more than 60 minutes	10	0	0	1	100	0	0	0	0	444	8	0	40	40	20	436	25	10	56	24	10	447
Optional school/district question																						
A.	0										100	0	0	0	100	428						
B.	0										0											
C.	0										0											
D.	0										0											

SCIENCE AND TECHNOLOGY RESULTS

Date: March 2007
Grade: 4
District: MSAD 74
School: Embden Elementary School

ACHIEVEMENT LEVEL DEFINITIONS		STUDENTS AT EACH ACHIEVEMENT LEVEL					
		School		District		State	
		N	%	N	%	N	%
Exceeds the Standards – The student’s work demonstrates in-depth understanding of essential concepts in science, including the ability to make multiple connections among central ideas. The student’s responses demonstrate the ability to synthesize information, analyze and solve difficult problems using the processes of scientific inquiry, and explain complex concepts using evidence and proper terminology to support and communicate logical conclusions. (scaled score 461–480)	2005-2006	1	10	4	7	751	5
	2006-2007	0	0	3	5	963	7
	Cum. Avg.	1	9	4	6	857	6
Meets the Standards – The student’s work demonstrates a general understanding of essential concepts in science, including the ability to make connections among central ideas. The student’s responses demonstrate the ability to analyze and solve routine problems using the processes of scientific inquiry and explain central concepts with sufficient clarity and accuracy to demonstrate general understanding. (scaled score 441–460)	2005-2006	5	50	32	52	7251	52
	2006-2007	4	40	28	46	6824	49
	Cum. Avg.	5	45	30	48	7038	50
Partially Meets the Standards – The student’s work demonstrates incomplete understanding of essential concepts in science and inconsistent connections among central ideas. The student’s responses demonstrate some ability to analyze and solve problems using scientific inquiry but the quality of responses is inconsistent. Explanation of concepts may be incomplete or unclear. (scaled score 429–440)	2005-2006	4	40	22	36	4514	32
	2006-2007	6	60	23	38	4382	32
	Cum. Avg.	5	45	23	37	4448	32
Does Not Meet the Standards – The student’s work demonstrates limited understanding of essential concepts in science and infrequent or inaccurate connections among central ideas. The student’s responses demonstrate minimal ability to solve problems and use the skills of scientific inquiry. There are many inaccuracies and explanations are illogical, incomplete, or missing. (scaled score 400–428)	2005-2006	0	0	3	5	1458	10
	2006-2007	0	0	7	11	1735	12
	Cum. Avg.	0	0	5	8	1597	11

Learning Results Content Standard Clusters	Number of Points Possible		Average Points Attained (Number and Percent)					
			School		District		State	
	N	%	N	%	N	%	N	%
Cluster 1: Life Sciences	12	25	6.0	50.0	7.0	58.3	7.6	63.3
Cluster 2: Physical Sciences	12	25	9.1	75.8	8.9	74.2	8.8	73.3
Cluster 3: Earth and Space Sciences	12	25	6.2	51.7	6.2	51.7	6.8	56.7
Cluster 4: Nature and Implications of Science	12	25	7.9	65.8	7.8	65.0	7.8	65.0

Cluster 1: Life Sciences

- A. Classifying Life Forms
- B. Ecology
- C. Cells

Cluster 2: Physical Sciences

- E. Structure of Matter
- H. Energy
- I. Motion

Cluster 3: Earth and Space Sciences

- D. Continuity and Change
- F. The Earth
- G. The Universe

Cluster 4: Nature and Implications of Science

- J. Inquiry and Problem Solving
- K. Scientific Reasoning
- L. Communication
- M. Implications of Science & Technology

Each content standard in the clusters shown is defined in Maine’s *Learning Results*, which are the basis for science and technology Grade Span Expectations. Each item on the MEA measures a grade span expectation, which can be found at <http://www.maine.gov/education/lsalt/gles.htm>.

SCIENCE AND TECHNOLOGY RESULTS

(CONTINUED)

Date: March 2007
Grade: 4
District: MSAD 74
School: Embden Elementary School

REPORTING CATEGORIES	School										District						State					
	Tested	E		M		P		D		Mean Scaled Score	Tested	E	M	P	D	Mean Scaled Score	Tested	E	M	P	D	Mean Scaled Score
	N	N	%	N	%	N	%	N	%		N	%	%	%	%		N	%	%	%	%	
All Students	10	0	0	4	40	6	60	0	0	440	61	5	46	38	11	442	13904	7	49	32	12	444
Ethnicity																						
African American	0										0						371	2	29	39	30	435
American Indian/Native Alaskan	0										2						110	2	35	41	22	440
Asian/Pacific Islander	0										0						202	10	49	30	12	445
Hispanic	0										1						166	4	41	40	16	441
White	10	0	0	4	40	6	60	0	0	440	58	5	45	38	12	442	13053	7	50	31	12	444
Not Reported	0										0						2					
Identified disability																						
Yes	3										21	0	57	33	10	443	2353	3	33	39	25	438
No	7	0	0	2	29	5	71	0	0	439	40	8	40	40	13	441	11551	8	52	30	10	445
Limited English proficient students																						
Current LEP in first year	0										0						5	0	20	40	40	432
Current LEP beyond first year	0										0						281	2	24	40	34	434
Economically disadvantaged																						
Yes	7	0	0	3	43	4	57	0	0	440	35	0	43	40	17	439	5370	3	41	37	19	440
No	3										26	12	50	35	4	446	8534	9	54	28	9	446
Migrant																						
Yes	0										0						4					
No	10	0	0	4	40	6	60	0	0	440	61	5	46	38	11	442	13900	7	49	32	12	444
Gender																						
Female	4										25	8	44	44	4	443	6720	7	48	32	13	443
Male	6	0	0	3	50	3	50	0	0	441	36	3	47	33	17	441	7182	7	50	31	12	444
Not Reported	0										0						2					
Title 1A targeted program																						
Yes	7	0	0	2	29	5	71	0	0	439	15	0	27	47	27	434	1865	1	31	42	26	437
No	3										46	7	52	35	7	444	12039	8	52	30	10	445
Gifted/talented program																						
Yes	0										0						401	31	64	4	1	458
No	10	0	0	4	40	6	60	0	0	440	61	5	46	38	11	442	13503	6	49	32	13	444

E = Exceeds the Standards M = Meets the Standards P = Partially Meets the Standards D = Does Not Meet the Standards

NOTE: Some achievement level results have been left blank because fewer than five (5) students were tested. N = Number

SCIENCE AND TECHNOLOGY RESULTS

(QUESTIONNAIRE ITEMS)

Date: March 2007
 Grade: 4
 District: MSAD 74
 School: Embden Elementary School

QUESTIONNAIRE ITEMS	School										District						State					
	Students in Each Category	E		M		P		D		Mean Scaled Score	Students in Each Category	E	M	P	D	Mean Scaled Score	Students in Each Category	E	M	P	D	Mean Scaled Score
	%	N	%	N	%	N	%	N	%		%	%	%	%	%		%	%	%	%	%	
How much homework do you do on school nights?																						
A. none	0										3	0	50	50	0	441	5	4	37	35	23	440
B. less than one hour	90	0	0	4	44	5	56	0	0	440	62	8	42	42	8	442	76	7	50	32	11	444
C. one to two hours	10	0	0	0	0	1	100	0	0	440	28	0	59	24	18	442	18	8	50	30	12	444
D. more than two hours	0										7	0	25	50	25	437	2	3	39	32	26	438
How well do the questions that you have just been given on this MEA test match what you have learned in school about science?																						
A. The questions on the test match what I have learned in science class.	40	0	0	1	25	3	75	0	0	438	25	20	33	27	20	444	21	10	50	28	12	445
B. They match some of what I have learned.	40	0	0	2	50	2	50	0	0	443	48	0	52	41	7	441	49	7	51	32	11	445
C. They match just a little of what I have learned.	20	0	0	1	50	1	50	0	0	441	21	0	54	31	15	441	24	5	48	33	14	443
D. There is no match.	0										7	0	25	75	0	443	7	4	38	37	21	439
Which of the following best describes how you rate yourself as a student in science?																						
A. very good	20	0	0	1	50	1	50	0	0	443	23	21	50	21	7	450	23	9	51	27	13	445
B. good	50	0	0	1	20	4	80	0	0	438	52	0	47	47	6	441	54	8	51	31	11	445
C. fair	30	0	0	2	67	1	33	0	0	443	20	0	42	33	25	436	20	4	46	37	14	442
D. poor	0										5	0	33	33	33	434	3	2	31	38	29	436
How difficult was the science part of this test?																						
A. harder than my regular schoolwork	0										12	0	57	29	14	443	24	6	48	32	14	443
B. about the same as my regular schoolwork	80	0	0	4	50	4	50	0	0	442	68	7	49	34	10	443	61	8	50	31	11	445
C. easier than my regular schoolwork	20	0	0	0	0	2	100	0	0	434	20	0	33	50	17	438	15	7	48	31	14	443
How often do you have science classes?																						
A. every day	0										38	4	52	35	9	444	26	7	48	32	13	444
B. a few times a week	10	0	0	0	0	1	100	0	0	436	42	4	44	36	16	440	53	8	51	31	11	445
C. once a week	0										3	0	50	0	50	432	10	4	45	32	18	442
D. a few times a month	90	0	0	4	44	5	56	0	0	441	17	0	40	60	0	441	11	6	48	33	13	443
Which statement best describes how you learn science?																						
A. I mostly read a textbook and answer questions, and/or take notes and do assignments. I use science kits for demonstrations and experiments.	50	0	0	2	40	3	60	0	0	439	34	5	50	30	15	442	23	5	45	35	15	442
B. I work in groups to design and conduct experiments.	10	0	0	0	0	1	100	0	0	440	24	0	36	64	0	442	26	4	44	37	16	442
C. I do a combination of A and B, mostly A.	20	0	0	0	0	2	100	0	0	439	27	6	38	38	19	442	28	10	53	28	10	446
D. I do a combination of A and B, mostly B.	20	0	0	2	100	0	0	0	0	445	15	11	56	22	11	442	24	9	54	27	10	446
Optional school/district question																						
A.	0										100	0	0	0	100	420						
B.	0										0											
C.	0										0											
D.	0										0											